

In accordance with the guidelines and waived provisions of 37 C.F.R. 1.121 promulgated in the USPTO announcement of January 31, 2003, please make the following amendments.

IN THE CLAIMS:

Please cancel claims 1-3 and 11-13, amend claims 4-8, and add new claims 17-21.

1.-3. (Canceled)

4. (Currently amended) The method for fabricating a semiconductor device of Claim [[2 or 3]] 17 or 18,

wherein said semiconductor layer has a face-centered cubic crystal structure,
said semiconductor-metal compound layer has a face-centered cubic crystal structure,
and
said compound layer is amorphous.

5 . (Currently amended) The method for fabricating a semiconductor device of Claim [[2 or 3]] 17 or 18,

wherein said particle energy beam includes a nonmetal element.

6. (Currently amended) The method for fabricating a semiconductor device of Claim [[1]] 17 or 18,

wherein said semiconductor layer has a face-centered cubic crystal structure, and
said semiconductor-metal compound layer has a face-centered cubic crystal structure.

7. (Currently amended) The method for fabricating a semiconductor device of Claim [[1]] 17 or 18,

wherein said semiconductor layer has a diamond or zinc blende crystal structure, and
said semiconductor-metal compound layer has a calcium fluoride crystal structure.

8. (Currently amended) The method for fabricating a semiconductor device of Claim [[1]] 17 or 18,

wherein said semiconductor layer is a silicon layer,
said nonmetal element is oxygen,
said metal film is a cobalt film, and
said semiconductor-metal compound layer is a cobalt silicide layer.

9. (Canceled)

10. (Original) The method for fabricating a semiconductor device of Claim 8, wherein the step of distributing said nonmetal element includes a step of forming a silicon oxide film on said silicon layer and distributing oxygen included in said silicon oxide film in the region in the vicinity of the surface portion of said silicon layer by irradiating said silicon oxide film with the said particle energy beam.

11.-16. (Canceled)

17. (New) A method for fabricating a semiconductor device comprising the steps of:
forming a compound layer including a semiconductor element and a nonmetal element on a semiconductor layer;

distributing said nonmetal element included in said compound layer in the region in the vicinity of the surface portion of said semiconductor layer through recoil by irradiating said compound layer with a particle energy beam;

removing said compound layer;

depositing a metal film on said semiconductor layer; and

epitaxially growing a semiconductor-metal compound layer in the surface portion of said semiconductor layer by causing a reaction between an element included in said semiconductor layer and a metal included in said metal film through annealing carried out on said metal film.

18. (New) A method for fabricating a semiconductor device comprising the steps of:

forming a compound layer including a semiconductor element and a nonmetal element on a semiconductor layer;

distributing said nonmetal element included in said compound layer in the region in the vicinity of the surface portion of said semiconductor layer through recoil and removing said compound layer by irradiating said compound layer with a particle energy beam;

depositing a metal film on said semiconductor layer; and

epitaxially growing a semiconductor-metal compound layer in the surface portion of said semiconductor layer by causing a reaction between an element included in said semiconductor layer and a metal included in said metal film through annealing carried out on said metal film.

19. (New) The method for fabricating a semiconductor device of Claim 17 or 18, wherein said nonmetal element is an oxygen element, a nitrogen element or a fluorine element.

20. (New) The method for fabricating a semiconductor device of Claim 17 or 18, wherein said region in the vicinity of the surface portion of said semiconductor layer is within a depth of 0.5 nm to 5 nm from the surface of the semiconductor layer and a dosage of said nonmetal element per unit area is between $4 \times 10^{14} \text{ cm}^{-2}$ and $4 \times 10^{15} \text{ cm}^{-2}$.

21. (New) A method for fabricating a semiconductor device comprising the steps of: distributing an oxygen element in a region in the vicinity of a surface portion of a semiconductor layer;

depositing a metal film on said semiconductor layer; and

epitaxially growing a semiconductor-metal compound layer in the surface portion of said semiconductor layer by causing a reaction between an element included in said semiconductor layer and a metal included in said metal film through annealing carried out on said metal film;

wherein said region in the vicinity of the surface portion of said semiconductor layer is within a depth of 0.5 nm to 5 nm from the surface of the semiconductor layer; and

a dosage of said nonmetal element per unit area is between $4 \times 10^{14} \text{ cm}^{-2}$ and $4 \times 10^{15} \text{ cm}^{-2}$.